Attachment 4

**Phone Conversation: U.S. EPA, Plombco, Inc., and Abt Associates, Inc.**
**8/16/2010 – Plombco Contact: Mark Aiken, VP Sales and Marketing**

**Company Information**

- Greater than $7 million
- Less than 500 employees, approx 100 employees
- Plombco makes both lead and lead-free weights
  - They use steel bodies with a zinc plating and powder coat
  - Stainless steel is not a factor in making wheel weights
- Plombco makes 175 million units each year (lead + steel + zinc)
- They have a take-back program for end-of-use weights; they sell the returned lead weights to smelters

**Manufacturing Process**

- Lead weight process includes using a 3 piece die cast mold, melting lead, inserting clip, allowing metal to harden
- Steel needs to have a zinc plated body to avoid corrosion – this implies an additional cost
  - Galvanizing process – steel weight is dipped in zinc
- Anything used for alloy wheels must be polyester powder coated, however steel is always powder coated
  - Lead could be powder coated or uncoated – this implies extra cost for steel weights for some applications that could take an uncoated lead weight

**Market Information**

- New car manufacturers have switched to lead-free weights, however in 80% of cases, these are replaced for lead weights during service
  - 90% of service shops will take off a lead-free weight and put on a lead weight
  - Some dealerships may request lead-free weights so that the product more closely resembles the original weight
- Service shops do not bill out the price of the wheel weight – not a profit item for them – so they want to lowest price possible. This means there would not be a shift in the market without legislation (though some companies, like Kauffman Tire, have switched voluntarily)
- Plombco's current market is 75% lead, 10-15% steel, 10% zinc
- Walmart has switched to selling steel weights
- Honda North America uses zinc weights
- Cal Tire uses steel weights
- The U.S. Postal Service uses steel weights
- California has tended toward using zinc as an alternative material
- The majority of lead-free weights in the market are steel
- In Europe, 80-90% of the market consists of two main products; in North America, there are 8 wheel weight styles
- Some tire shops currently offer lead-free weights at a surcharge
- Tire service shops sell wheel weights, tire valves, and tire repair kits as key products
  - Distributors price wheel weights aggressively so that they can acquire the business of shops and sell other products at a higher margin
- Average tire shop buys $4,000 worth of wheel weights each year
- Plombco is a mid-range weight manufacturer in North America – they represent about 25% of the North American market

- Companies who manufactured lead weights in states with regulations can no longer sell to out-of-state markets

**Differences in Lead vs. Non-Lead**

- Steel currently costs $410/ton; lead costs $2,046/ton
    - Lead is a byproduct of zinc – their prices tend to move together and are highly volatile – for example, in Nov. 2009, lead was $0.95/lb., it went up to $1.10, down to $0.65, and is now back around $0.93
    - Manufacturers may try to change prices based on the raw material prices (though they did not over the last year)
    - Steel is much more stable in price
- Advantages of steel over zinc
    - Steel is more stable in price
    - Steel is more easily recycled – it can be sent to the scrap yard with other materials
    - Zinc is more volatile in price
    - Zinc is very difficult to recycle

**Planned Conversion**

- Plombco plans to reach 95% capacity for lead-free weight production
    - There would still be an international market for lead weights – South Africa, Australia, Canada, etc.
    - Goal is to do it quickly, though it is dependent on regulation and prices for materials
    - Motivation is market demand and legislation

**One-Time Costs**

- Would undergo $2 million in investment for equipment to reach 95%
    - Need more presses, more assembly equipment, more clip manufacturing equipment, added inventory
    - They need "more of the same" – they already have the processes in place
    - Timeframe would be a max of 6 months to add capacity

**Recurring Costs**

- It is difficult to estimate a change in costs/prices because the price of lead is volatile
- Manufacturers all used a similar process for lead, but they use different processes for lead-free products
- Processing for steel costs a lot more than for lead
    - Tooling for steel is very expensive
    - There are more processes, higher labor costs
    - Steel takes longer to heat, more electricity costs, longer time needed
- Lead and zinc both use a die cast process
    - Zinc requires more sophisticated equipment
        - Lead is thicker than zinc – zinc therefore requires a better seal, higher temperatures, and higher pressures for casting
    - Zinc weights need to undergo a tumbling process to take off rough edges
    - Cycle time for zinc is slower
- Steel uses a stamping process
- The clip must be more precise

- Since lead is a softer material, the weight can be bent to fit; however, since steel is rigid, the clip must be very precise
- This implies a higher cost for manufacturing the clips

- There is a difference in cost for rejected product
  - Rejected lead weights could be immediately reused – they can recoup about 50% of the cost
  - Rejected steel weights cannot be reused and there is little value for scrap steel – they cannot recoup lost cost for rejected material

**Inventories**

- Recommends phasing the regulation
  - Distributors keep about 60 days of inventory
  - Tire dealers keep about 1 month of inventory
- They need to keep 3 inventories when there are individual state regulations – this implies a very large cost for them

**Price Differences**

- At today's price of lead ($2,046/ton), could estimate the average cost of a wheel weight would increase by 25% to the consumer
- Plombco expects to be able to pass on close to 100% of the increase in cost to the buyer
- 37% of wheels are steel wheels – producers sell low margin, uncoated lead weights for these – this allows for a markup on higher end coated weights for aluminum wheels
  - With steel, all weights must be coated, so the weights sold for that 37% of wheels will go up in price
- Estimates a lead wheel weight costs $0.20, and there are 8 on a car. This equals $1.60. Assuming a 25% increase for steel, this would equal an increase of $0.05 per weight, or $0.40 per car.
  - This is an insignificant increase in price of rebalancing, since some rebalancing shops might charge $20 for the service
  - Expects impact on tire dealers and consumers to be minimal